UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 08/21/2008

NOTICE OF ALLOWANCE AND FEE(S) DUE

55694 7590 08/21/2008 DRINKER BIDDLE & REATH (DC) 1500 K STREET, N.W. SUITE 1100

WASHINGTON DC 20005-1209

EXAMINER INGHAM, JOHN C				
2914	•			

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,508	09/03/2004	Takayoshi Honma	046124-5314	1802

TITLE OF INVENTION: SEMICONDUCTOR LIGHT EMITTING DEVICE AND PLANT CULTIVATING SYSTEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	11/21/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION NOT THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

indicated unless correct maintenance fee notifica	ed below or directed otl	ng the Patent, advance of nerwise in Block 1, by (a) specifying a new co	respondence address	; and/o	r (b) indicating a sep	arate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)			? H	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
1500 K STREE' SUITE 1100	DDLE & REATH T, N.W.	/2008 (DC)	I S a t	Cei hereby certify that the tates Postal Service of ddressed to the Mai cansmitted to the USF	rtificate nis Fee(with sur I Stop TO (57	e of Mailing or Trans (s) Transmittal is bein fficient postage for fir ISSUE FEE address (1) 273-2885, on the c	mission g deposited with the United st class mail in an envelope above, or being facsimile late indicated below.
WASHINGTON	N, DC 20005-1209						(Depositor's name)
							(Signature)
			Į				(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENT	OR	ATTC	RNEY DOCKET NO.	CONFIRMATION NO.
10/506,508 TITLE OF INVENTION	09/03/2004 i: SEMICONDUCTOR I	JGHT EMITTING DEV	Takayoshi Honma ICE AND PLANT CUI	TIVATING SYSTER	M	046124-5314	1802
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DU	E PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0		\$1740	11/21/2008
EXAM	INER	ART UNIT	CLASS-SUBCLASS	7			
INGHAM	I, JOHN C	2814	257-714000	_			
"Fee Address" ind PTO/SB/47; Rev 03- Number is required. 3. ASSIGNEE NAME A	condence address (or Cha B/122) attached. lication (or "Fee Address 32 or more recent) attach LND RESIDENCE DAT. less an assignee is ident th in 37 CFR 3.11. Comj	inge of Correspondence "Indication form and: Use of a Customer A TO BE PRINTED ON	(I) the names of up or agents OR, alteri (2) the name of a si registered attorney 2 registered patent a listed, no name will THE PATENT (print or	agle firm (having as a ser agent) and the name torneys or agents. If the printed. type) patent. If an assignant assignment.	a memb nes of u no nan	per a 2	locument has been filed for
							oup entity Government
Advance Order -	No small entity discount p	permitted)	b. Payment of Fee(s): (I A check is enclose Payment by credit The Director is her overpayment, to D	d. card. Form PTO-203	3 is atta	ached. required fee(s), any d	shown above) efficiency, or credit any on extra copy of this form).
 Change in Entity Sta a. Applicant claim 	itus (from status indicate is SMALL ENTITY stati		☐ b. Applicant is no	onger claiming SMA	LLEN	TITY status. See 37 C	FR 1.27(g)(2).
							he assignee or other party in
interest as snown by the	records of the Officed Sta	nes ratent and Trademar)	Onice.				
Authorized Signature				Date			
Typed or printed name				Registration !			
This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this bu /irginia 22313-1450. DC 813-1450.	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR	on is required to obtain 1.14. This collection is r depending upon the in e Chief Information Of COMPLETED FORMS	or retain a benefit by estimated to take 12 dividual case. Any co ficer, U.S. Patent and TO THIS ADDRES	the pub minute ommen Trader S. SEN	lic which is to file (an s to complete, includi ts on the amount of ti nark Office, U.S. Dep D TO: Commissioner	d by the USPTO to process) ag gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FILING DATE FIRST NAMED INVENTOR		CONFIRMATION NO.
10/506,508	09/03/2004	Takayoshi Honma	046124-5314	1802
55694 75	90 08/21/2008		EXAM	UNER
DRINKER BIDDLE & REATH (DC)		INOHAM, JOHN C		
1500 K STREET,	N.W.		ART UNIT	PAPER NUMBER
SUITE 1100 WASHINGTON, DC 20005-1209		2814 DATE MAII ED: 08/21/200	8	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/506,508 HONMA ET AL. Notice of Allowability Examiner Art Unit JOHN C. INGHAM 2814 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to amendments of 4/24/2008. 2. The allowed claim(s) is/are 1-5. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some* c) ☐ None of the: 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date

Paper No./Mail Date

of Biological Material

Information Disclosure Statements (PTO/SB/08).

4. T Examiner's Comment Regarding Requirement for Deposit

7. T Examiner's Amendment/Comment

9. ☐ Other .

8. X Examiner's Statement of Reasons for Allowance

Application/Control Number: 10/506,508 Page 2

Art Unit: 2814

DETAILED ACTION

Allowable Subject Matter

Claims 1-5 are allowed.

2. The following is an examiner's statement of reasons for allowance: the prior art does not disclose or make obvious the device claimed, wherein the heat sink includes a first heat sink provided between the light emitting element array and the first electrode and a second heat sink provided between the light emitting element array and the second electrode, and the cooling water passage includes a first passage part provided in the first heat sink and placed between the light emitting element array and the first electrode, and a second passage part provided in the second heat sink and placed between the light emitting element array and the second between the light emitting element array and the second electrode.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN C. INGHAM whose telephone number is (571)272-8793. The examiner can normally be reached on M-F, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2814

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Howard Weiss/ Primary Examiner Art Unit 2814 John C Ingham Examiner Art Unit 2814

/J. C. I./ Examiner, Art Unit 2814